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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,516	07/19/2002	Hiroto Inoue	2002-0404A	7818
513	7590	11/14/2003	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EASTHOM, KARL D	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/089,516

Applicant(s)

INOUE ET AL.

Examiner

Karl D Easthom

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-6, 8-11, 17 and 19-32 is/are pending in the application.
- 4a) Of the above claim(s) 4-6, 8-11, 17, 19-22, 26 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-25 and 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/19/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2832

1. As noted in the OA of 5/28/03, Applicant's election of the species represented by Embodiment 1 without traversal, claims 1-3, said 7, 12-16 and 18 readable thereon is acknowledged, now claims 23-32. However, like claims 7 and 18, earlier, claims 26 and 32 do not appear to read on that species since for the former, no metal substrate is disclosed as functioning as the conductive section as the plane substrate for that species, and for the former, the species does not support the slidable element. Thus those claims have been withdrawn as drawn to a nonelected species.
2. The drawings are objected to under 37 CFR 1.84 for minor informalities because they lack the correct page numbers since "/33" indicates there are 33 figure sheets but the last three sheets 31-33/33 are not figures. It appears that there are only 30 figure sheets.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
4. 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Asher. Asher discloses the claimed invention at Figs. 1 and 6 with ring shaped resistance element 12 having four electrodes 18 on flexible insulative substrate 10, conductive section 21 on plane substrate 20, controller 42, 40, wherein the substrates are pressed and the contacted position is detected as claimed. In claim 23, the first and second conductive layers are the ring portions connected to 29 at Fig. 9. The tiltable knob at Fig. 1 has ring shaped protruded section 44, with the circuits at Fig. 10 and description thereof disclosing the voltages and detection. In claim 25, the

Art Unit: 2832

equiangular interval is 180 degrees at Fig. 9 and the layers are insulated from each other as not touching.. Fig. 6 is operable as Fig. 1 according to the disclosure.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asher in view of Emery. Asher discloses the claimed invention substantially as noted above with respect to claims above, except the top-casing having through-hole exposing the knob, and the flange and resilient body of claim 31. The casing 30 is disclosed at Fig. 1 of Emery for housing the switch and exposing the knob, and has a flange 22 and resilient portion 31 whereas Asher discloses a similar device having an actuator 40 and spring 48 that will not function without a case, making suggestion for such a case implicit and obvious because the spring 48 could serve no purpose absent such a case as it needs a structure against which to press. In claims 27-28, the Asher knob tilts around pivot point 46, and has ringed shaped portion 44 and knob 42. The conductive section at Fig. 6 has the two sections as noted above. Fig. 6 is operable as Fig. 1 according to the disclosure. In claim 29, the substrate is a printed circuit substrate as it has printed electrodes thereon. In claim 30, the flexible substrate 10 is above the plane substrate 20. For claim 31, the flange-preventing 22 and resilient body are disclosed at Fig. 2 of Emery, suggested at the abstract for providing a snap feel and low resistance effect such that such a device would have been obvious where Asher discloses a spring and flange as noted above.

7. Applicant's arguments filed 10/11/03 have been fully considered but they are not persuasive. As to the drawings, no drawings have yet been scanned into the system, so that the objection is held until that time. Inconvenience to the applicant is regretted. Applicant argues that Asher does not disclose more than two electrodes disposed thereon. This is not correct, as more than two electrodes 18 are seen at Fig. 9. Is applicant arguing the "disposed thereon" aspect, or the more than two ? It is not clear, nonetheless, as the thereon is met by touching, and necessarily having some overlap. The nonelected claims are noted above, as withdrawn, where applicant apparently agrees the features correspond to nonelected embodiments.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The

Art Unit: 2832

examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



KARL D. EASTHOM  
PRIMARY EXAMINER